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FILE 'REGISTRY' ENTERED ON 22 SEP 2009
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)
=> D HIS
     FILE 'HCAPLUS' ENTERED ON 22 SEP 2009
           9120 S TAKEI ?/AU
L1
L2
           760 S SAKAIDA ?/AU
L3
           1668 S SHINJO ?/AU
             12 S L1 AND L2 AND L3
L4
L5
          23538 S DEXTRIN#
L6
              4 S L1 AND L2 AND L3 AND L5
     FILE 'REGISTRY' ENTERED ON 22 SEP 2009
L7
             1 S 9004-53-9
L8
             1 S 7585-39-9
     FILE 'HCA' ENTERED ON 22 SEP 2009
           453 S (L7/D OR L7/DP OR L8 OR L8/DP) (L) ESTER?
L9
L10
             31 S (L7/D OR L7/DP OR L8 OR L8/DP) (L) (BENZOAT? OR ACETONOAT
L11
           7812 S DAMASCEN?
L12
         19553 S PAG OR PAGS OR PHOTOACID? OR PHOTOGENERA? OR PHOTO(2A)(
         149409 S LITHO? OR PHOTOLITHO? OR CHROMOLITHO?
L13
         228352 S PHOTORESIST? OR RESIST OR RESISTS OR PHOTOMASK? OR MASK
L14
L15
              1 S (L9 OR L10) AND L11
              1 S (L9 OR L10) AND L12
L16
L17
              6 S (L9 OR L10) AND L13
L18
             4 S (L9 OR L10) AND L14
    FILE 'HCA' ENTERED ON 22 SEP 2009
L19
              2 S (DEXTRIN#(2A)BENZOAT?)/IT
               E COATING(S)/CV
L20
          43478 S E3 OR E7
               E COATING MATERIALS/CV
L21
         341725 S E3
               E COATING PROCESS/CV
L22
         171819 S E3
L23
         345291 S CROSSLINK? OR CROSS?(2A)LINK?
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FILE 'LREGISTRY' ENTERED ON 22 SEP 2009

14 S (L9 OR L10) AND L23

9 S (L9 OR L10) AND (L20 OR L21 OR L22)

=> FILE REG

L24

L25

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E DEXTRIN/CN
L26
             1 S E3
              E B-CYCLODEXTRIN/CN
             1 S E3
L27
              E ACETIC ACID/CN
L28
             1 S E3
              E PROPANOIC ACID/CN
L29
             1 S E3
              E BUTANOIC ACID/CN
L30
             1 S E3
              E ISOBUTANOIC ACID/CN
             1 S E3
L31
              E FORMIC ACID/CN
L32
             1 S E3
             E BENZOIC ACID/CN
L33
             1 S E3
             0 S 9004-53-9/CRN
L34
            15 S 7585-39-9/CRN
L35
L36
             6 S L28-L33
               SEL L36 1-6 RN
               EDIT E1-E6 /BI /CRN
           243 S E1-E6
L37
    FILE 'REGISTRY' ENTERED ON 22 SEP 2009
          239 S L34
L38
L39
         8754 S L35
L40
         51495 S L37
            78 S (L38 OR L39) AND L40
L41
    FILE 'HCA' ENTERED ON 22 SEP 2009
L42
           141 S L41
L43
             9 S L42 AND (L11-L14 OR L20 OR L21 OR L22)
L44
             4 S L42 AND L23
L45
            22 S L15 OR L16 OR L17 OR L18 OR L24 OR L43
            13 S (L25 OR L44) NOT L45
L46
L47
            13 S 1808-2003/PY, PRY, AY AND L45
L48
             6 S 1808-2003/PY, PRY, AY AND L46
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#### => FILE HCA

FILE 'HCA' ENTERED ON 22 SEP 2009
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

## COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

## => D L47 1-13 BIB ABS HITSTR HITIND RE

US 2006-429579

EP 2004-1935

ANSWER 1 OF 13 HCA COPYRIGHT 2009 ACS on STN L47 147:523534 HCA Full-text AN Articles having a polymer grafted cyclodextrin ΤI ΙN Wood, Willard E.; Bohrer, Timothy H.; Kellenberger, Stanley R.; Beaverson, Neil J. PΑ USA SO U.S. Pat. Appl. Publ., 53pp., Cont.-in-part of U.S. Ser. No. 429,579. CODEN: USXXCO Patent DT LA English FAN.CNT 3 PATENT NO. DATE KIND DATE APPLICATION NO. \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ PI US 20070264520 A1 20071115 US 2007-761105 200706 11 <--US 20040110901 A1 20040610 US 2003-672297 200309 25 <--B2 20070123 US 7166671 EP 1921109 A2 20080514 EP 2007-119818 200401 29 EP 1921109 A3 20080827 AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU, RS US 20060205873 A1 20060914 US 2006-429579 200605 05 <--PRAI US 2002-432523P P 20021210 <--A3 US 2003-672297 20030925 <--A2

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT Durable and disposable articles are provided which include a AΒ thermoplastic polymer compn., which includes a blend of a polymer and

20060505

20040129

А3

a modified polymer. The modified polymer has covalently bonded pendant substituents derived from cyclodextrin. The articles can be a films, coatings, nonwoven webs, or monolithic articles. An article can have the polymer compn. as one part of the article, such as in one distinct area of the article, or on the surface of the article, for example as a coating or surface film. The article can be, for example, a multilayer barrier film, a nonwoven sheet or pad, an absorbent article, or a storage container.

IT 7585-39-9DP,  $\beta$ -Cyclodextrin, esters with maleic anhydride copolymer blends

(polyolefin blends; resin blends contg. cyclodextrin-modified polymers and their use in coating, films, nowoven frabrics, packaging materials)

RN 7585-39-9 HCA

CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

```
INCL 428606000; 427385500; 428220000; 428077000; 442334000; 442351000;
     442401000; 525231000; 525240000; 525055000
     38-3 (Plastics Fabrication and Uses)
CC
     Section cross-reference(s): 40, 42
ΙT
     Absorbents
     Beverages
     Bottles
       Coating materials
     Food
     Fuel tanks
     Laminated materials
     Microfibers
     Nonwoven fabrics
     Packaging materials
     Plastic films
     Sealing compositions
        (resin blends contg. cyclodextrin-modified polymers and their use
        in coating, films, nowoven frabrics, packaging materials)
     7585-39-9DP, \beta-Cyclodextrin, esters with
ΙT
     maleic anhydride copolymer blends
                                       10016-20-3DP,
     \alpha-Cyclodextrin, esters with maleic anhydride copolymer blends
     854053-02-4DP, Plexar PX 5125, esters with cyclodextrin
        (polyolefin blends; resin blends contg. cyclodextrin-modified
        polymers and their use in coating, films, nowoven frabrics,
        packaging materials)
OSC.G
              THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1
              CITINGS)
     ANSWER 2 OF 13
                    HCA COPYRIGHT 2009 ACS on STN
L47
ΑN
     143:31894 HCA Full-text
     Dextrin fatty acid esters as oil gelling agents, their preparation,
ΤI
     and oil gels and cosmetics containing the gelling agents
     Tsukioka, Daisuke; Suzuki, Takanao
ΙN
     Chiba Seifun Co., Ltd., Japan
PA
     Jpn. Kokai Tokkyo Koho, 25 pp.
SO
     CODEN: JKXXAF
    Patent
DТ
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                        KIND
                                                                  DATE
                                DATE
                                           APPLICATION NO.
                         ____
PΙ
    JP 2005145851
                        A 20050609 JP 2003-383591
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200311

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JP 4079371 B2
PRAI JP 2003-383591
OS MARPAT 143:31894
GI

R1

Dextrin fatty acid esters, which satisfy (1) av. polymn. degree of AB monosaccharides is 10-150, (2) av. acyl group substitution degree ≥1.0 per glucose unit, and (3) acyl groups are C12-22 linear satd. acyl, C4-26 branched acyl, C6-30 unsatd. acyl and/or C2-11 linear satd. acyl and ≥50% of the constituent acyl groups is C12-22 linear satd. acyl, are prepd. by esterifying dextrin with fatty acid halides or acid anhydrides in the presence of pyridine derivs. I (R1 = Me, Et, CO2H, CO2Me, CONH2, NMe2; R2 = H, Me). Also claimed are oil gels and cosmetics contg. the oil gelling agents. The oil gelling agents are odorless, dissolve oils well and provide oil gels and cosmetics with no undissolved matters. Thus, palmityl chloride was added dropwise to a dispersion of dextrin and 3-methylpyridine at 50° over 30 min and the reaction mixt. was heated at 90° for 4 h to give dextrin palmitate (II) with av. acyl substitution degree 2.1 per glucose 2.1. A lipstick, lithog. inks, etc., contg. II were also formulated.

20080423

20031113 <--

## IT 852988-84-2P

(esterification of dextrin with acyl halides or acid anhydrides using substituted pyridines and use of the esters as oil gelling agents for cosmetics, etc.)

RN 852988-84-2 HCA

CN Dextrin, acetate hexadecanoate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-53-9 CMF Unspecified

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CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
     CRN 64-19-7
     CMF C2 H4 O2
     CM
         3
     CRN 57-10-3
     CMF C16 H32 O2
HO_2C-(CH_2)_{14}-Me
IC
     ICM A61K007-00
     ICS A61K007-025; A61K007-032; A61K007-035; A61K007-48; C08B030-18;
     62-4 (Essential Oils and Cosmetics)
CC
     Section cross-reference(s): 33, 42
ΙT
     Inks
        (lithog.; esterification of dextrin with acyl halides
        or acid anhydrides using substituted pyridines and use of the
        esters as oil gelling agents for cosmetics, etc.)
ΙT
     Coating materials
        (oil-based; esterification of dextrin with acyl halides or acid
        anhydrides using substituted pyridines and use of the esters as
        oil gelling agents for cosmetics, etc.)
     98-92-0P, Nicotinamide
                             93792-77-9P, Dextrin myristate
ΙT
     112444-74-3P, Dextrin behenate 183387-52-2P, Dextrin
     2-ethylhexanoate palmitate 260357-37-7P, Dextrin isostearate
                 852988-82-0P 852988-83-1P 852988-84-2P
        (esterification of dextrin with acyl halides or acid anhydrides
        using substituted pyridines and use of the esters as oil gelling
        agents for cosmetics, etc.)
```

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ANSWER 3 OF 13 HCA COPYRIGHT 2009 ACS on STN
L47
ΑN
    142:454330 HCA Full-text
    Composition for forming underlying film containing dextrin ester
ΤI
    compound
    Takei, Satoshi; Sakaida, Yasushi; Shinjo, Tetsuya
IN
    Nissan Chemical Industries, Ltd., Japan
PA
SO
    PCT Int. Appl., 34 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    Japanese
FAN.CNT 1
                       KIND DATE APPLICATION NO.
    PATENT NO.
                                                                DATE
     _____
                       ____
                                          ______
                              _____
     _____
    WO 2005043248
                       A1 20050512 WO 2004-JP16129
PΙ
                                                                200410
                                                                29
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            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
        W:
            CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
            GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
            KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
            MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
            SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
            VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
            DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL,
            PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
            GW, ML, MR, NE, SN, TD, TG
                        A1 20060719 EP 2004-817421
    EP 1681594
                                                                200410
                                                                29
                                               <--
                              20090513
    EP 1681594
                        В1
            DE, FR, GB, IT, NL
    CN 1875324
                              20061206
                                        CN 2004-80031792
                        Α
                                                                200410
                                                                29
                                               <--
    JP 4203767
                        В2
                              20090107
                                         JP 2005-515179
                                                                200410
                                                                29
                                               <--
    KR 2006116805 A
                              20061115 KR 2006-707986
                                                                200604
                                                                25
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200604 28

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PRAI JP 2003-370354 A 20031030 <-- WO 2004-JP16129 W 20041029

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Disclosed is a compn. for forming an underlying film for lithog.

which is used in a lithog. process in semiconductor device prodn.

Also disclosed is an underlying film for lithog. which has a higher dry etching rate than a photoresist and does not cause intermixing with the photoresist. The compn. for forming an underlying film for lithog. contains a dextrin ester compd. wherein at least 50% of hydroxyl groups are transformed to ester groups, a crosslink-able

compd. and an org. solvent.

IT 9004-53-9D, Dextrin, acetoxylated

(compn. for forming underlying film contg. dextrin ester compd.)

RN 9004-53-9 HCA

CN Dextrin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IC ICM G03F007-11 ICS H01L021-027

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76

ST compn underlying film dextrin ester photolithog

IT Photolithography

Semiconductor device fabrication

(compn. for forming underlying film contq. dextrin ester compd.)

IT Coating materials

(undercoatings; compn. for forming underlying film contg. dextrin ester compd.)

IT 9004-53-9D, Dextrin, acetoxylated

9004-53-9D, Dextrin, benzoated 17464-88-9,

Tetramethoxymethyl glycoluril

(compn. for forming underlying film contg. dextrin ester compd.)

RE CITED REFERENCES

- (1) Hitachi Ltd; JP 62-62521 A 1987
- (2) Nissan Chemical Industries Ltd; WO 0205035 A1 2002 HCA
- (3) Nissan Chemical Industries Ltd; EP 1315045 A 2002 HCA
- (4) Nissan Chemical Industries Ltd; WO 2004061526 A1 2004 HCA
- (5) Shin-Etsu Chemical Co Ltd; JP 2002107938 A 2002 HCA
- (6) Shipley Co L L C; EP 1035442 A2 2000 HCA
- (7) Shipley Co L L C; JP 2000294504 A 2000 HCA

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(8) Shipley Co L L C; EP 1150343 A2 2002 CAPLUS
(9) Shipley Co L L C; JP 200247430 A 2002
OSC.G 1
              THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1
              CITINGS)
                    HCA COPYRIGHT 2009 ACS on STN
L47
     ANSWER 4 OF 13
     140:2591 HCA Full-text
ΑN
     Peptide derivatives, and their use for the synthesis of
ΤI
     silicon-based composite materials
     McAuliffe, Joseph C.; Bond, Risha Lindig; Cuevas, William A.
IN
     Dow Corning Corporation, USA; Genencor International, Inc.
PA
SO
     PCT Int. Appl., 52 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                          APPLICATION NO.
                                                                   DATE
                         ____
PI
     WO 2003099843
                         A2
                                20031204
                                          WO 2003-US15859
                                                                   200305
                                                                   20
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     WO 2003099843
                                20040701
                         А3
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     CA 2485169
                          Α1
                                20031204
                                            CA 2003-2485169
                                                                   200305
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     AU 2003233595
                         A1
                                20031212
                                          AU 2003-233595
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                                20040226
     US 20040039179
                       A1
                                            US 2003-441908
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200305 20 US 7361731 B2 20080422

EP 1551762 A2 20050713 EP 2003-729032

200305

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,

SK

US 20080182971 A1 20080731 US 2007-876258

200710

22

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PRAI US 2002-381928P P 20020520 <-- US 2003-441908 A1 20030520 <-- WO 2003-US15859 W 20030520 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Methods for forming peptide derivs. using functional moieties and peptide derivs. are provided. Further, methods for using peptide derivs. to form silicon-based composite materials and silicon-based composite materials formed thereby are provided. The silicon-based composite materials may have features on the nanoscale, and the materials may exhibit characteristics derived from the functional moieties on the peptide derivs. It is emphasized that this abstr. is provided to comply with the rules requiring an abstr. which will allow a searcher or other reader to quickly ascertain the subject matter of the tech. disclosure. It is submitted with the understanding that is will not be used to interpret or limit the scope or meaning of the claims.

IT 7585-39-9D,  $\beta$ -Cyclodextrin, carboxy Me ester derivs.

(peptide derivs., and their use for synthesis of silicon-based composite materials)

RN 7585-39-9 HCA

CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

IC ICM C07K

CC 9-16 (Biochemical Methods)

IT Ink-jet printing

# Lithography

Ηф

(peptide derivs., and their use for synthesis of silicon-based composite materials)

IT 52-90-4, Cysteine, analysis 56-45-1, L-Serine, analysis 56-85-9, L-Glutamine, analysis 56-87-1, L-Lysine, analysis 57-88-5, Cholesterol, analysis 58-85-5, D-Biotin 60-00-4, EDTA, analysis 60-18-4, L-Tyrosine, analysis 70-47-3, L-Asparagine, analysis 71-00-1, L-Histidine, analysis 72-19-5, L-Threonine, analysis 74-79-3, L-Arginine, analysis 75-77-4, Trimethylchlorosilane, analysis 98-13-5, Phenyltrichlorosilane 143-07-7, Lauric acid, analysis 149-74-6, Phenylmethyldichlorosilane 681-84-5,

```
Tetramethoxysilane 919-30-2, 3-Aminopropyltriethoxysilane
    1112-39-6, Dimethyldimethoxysilane 1185-55-3,
    Methyltrimethoxysilane 3786-54-7, 1-Pyrenemethylamine
    7585-39-9D, \beta-Cyclodextrin, carboxy Me ester
            9014-01-1, Subtilisin 9073-60-3, \beta-Lactamase
    derivs.
    10193-36-9, Orthosilicic acid 60239-22-7 64709-55-3, 1-Pyrene
    acetic acid 72088-94-9, 5(6)-Carboxyfluorescein 143413-47-2
    380488-45-9 444084-12-2 444084-13-3 444084-14-4 444084-15-5
    444084-16-6 444084-17-7 444084-18-8 627529-62-8 627529-63-9
    627529-64-0 627529-65-1 627529-66-2 627529-67-3 627529-68-4
    627529-69-5
       (peptide derivs., and their use for synthesis of silicon-based
       composite materials)
    CITED REFERENCES
RE
(1) Anon; WO 9732892 A1 HCA
OSC.G 1
            THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1
             CITINGS)
L47 ANSWER 5 OF 13 HCA COPYRIGHT 2009 ACS on STN
AN
    135:93032 HCA Full-text
    Manufacture and polymerization of acrylic monomer-cyclodextrin
ΤI
    complexes as binders for lacquers and coatings
    Flosbach, Carmen; Gloeckner, Patrick; Klostermann, Peter; Paschmann,
ΙN
    Volker; Ritter, Helmut
    E. I. Du Pont de Nemours & Co., USA
PA
    PCT Int. Appl., 27 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    German
FAN.CNT 1
    PATENT NO.
               KIND DATE APPLICATION NO.
                                                         DATE
                      ____
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PI WO 2001049746 A1 20010712 WO 2000-EP12648
                                                              200012
                                                              13
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            AL, AU, BA, BG, BR, CA, CN, CZ, EE, HU, JP, KR, LT, LV, MX,
            NO, PL, RO, RU, SG, SI, SK, TR, UA, US, YU
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
            NL, PT, SE, TR
                       A1 20010712 DE 1999-19963586
    DE 19963586
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                                                              29
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                A1 20021030 EP 2000-983310
    EP 1252197
                                                              200012
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20030730 EP 1252197 В1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR Τ 20030815 AT 2000-983310 AT 246207 200012 13 PT 1252197 Т 20031231 PT 2000-983310 200012 13 <--ES 2200980 20040316 ES 2000-983310 Т3 200012 1.3 <--US 20030130416 20030710 US 2002-169675 A1 200207 01

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PRAI DE 1999-19963586 19991229 Α <--WO 2000-EP12648 20001213 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT AB The binders for lacquers and coatings, esp. for powder coatings, are manufd. by radical homopolymn. or copolymn. of H2O-insol. ethylenically unsatd. monomers, optionally together with H2O-sol. monomers. The homopolymn. or copolymn. is carried out in an aq. medium in the presence of conventional polymn. initiators, until polymers with an av. mol. wt. of 1000-1,000,000 are obtained. polymn. takes place in the presence of cyclodextrin or cyclodextrin derivs. and/or the H2O-insol. monomers are used in the form of complexes contq. cyclodextrin and/or cyclodextrin derivs. For example, adding isobornyl acrylate to aq. soln. of partially methylated  $\beta$ -cyclodextrin and exposing the mixt. to ultrasound gave a soln. of 1:1 monomer-cyclodextrin complex. Adding K2S208 and NaHS03 to the soln. under N gave, after 12 h, 93% polymer free from the monomer complex.

7585-39-9DP,  $\beta$ -Cyclodextrin, methylated, compds. with ΙT (meth)acrylate esters, polymers

> (manuf. and polymn. of acrylic monomer-cyclodextrin complexes as binders for lacquers and coatings)

7585-39-9 HCA RN

CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

IC ICM C08F002-24

ICS C08F251-00; C09D133-06

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42

IT Coating materials

(manuf. and polymn. of acrylic monomer-cyclodextrin complexes as binders for lacquers and)

IT Coating materials

(powder; manuf. and polymn. of acrylic monomer-cyclodextrin complexes as binders for lacquers and coatings)

IT 80-62-6DP, Methyl methacrylate, compds. with  $\beta$ -cyclodextrin, polymers 97-88-1DP, Butyl methacrylate, compds. with  $\beta$ -cyclodextrin, polymers 100-42-5DP, Styrene, compds. with  $\beta$ -cyclodextrin, polymers 101-43-9DP, Cyclohexyl methacrylate,

compds. with  $\beta$ -cyclodextrin, polymers 106-91-2DP, Glycidyl methacrylate, compds. with  $\beta$ -cyclodextrin, polymers 141-32-2DP, Butyl acrylate, compds. with  $\beta$ -cyclodextrin, polymers 818-61-1DP, compds. with  $\beta$ -cyclodextrin, polymers 868-77-9DP, compds. with  $\beta$ -cyclodextrin, polymers 2210-25-5DP, N-Isopropylacrylamide, compds. with  $\beta$ -cyclodextrin, copolymers with styrene 5888-33-5DP, Isobornyl acrylate, compds. with  $\beta$ -cyclodextrin, polymers 7534-94-3DP, Isobornyl methacrylate, compds. with  $\beta$ -cyclodextrin, polymers 7585-39-9DP,  $\beta$ -Cyclodextrin, methylated, compds. with (meth)acrylate esters, polymers

(manuf. and polymn. of acrylic monomer-cyclodextrin complexes as binders for lacquers and coatings)

RE CITED REFERENCES

- (1) Basf; EP 0780401 A 1997 HCA
- (2) Basf; DE 19533269 A 1997 HCA
- (3) National Starch And Chem Investment Holding Corp; EP 0889058 A 1999 HCA
- (4) Rohm And Haas Co; EP 0710675 A 1996 HCA
- OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
- L47 ANSWER 6 OF 13 HCA COPYRIGHT 2009 ACS on STN
- AN 134:36501 HCA Full-text
- TI Microsensors and nanoporous polymers for detection and removal organic compounds
- AU Li, DeQuan; Ma, Min
- CS Los Alamos National Laboratory, Los Alamos, NM, 87545, USA
- Chemical Sensors, Technical Digest of the International Meeting, 7th, Beijing, China, July 27-30, 1998 (1998), 44-46
  Publisher: International Academic Publishers, Beijing, Peop. Rep. China.

CODEN: 69AJWI

- DT Conference
- LA English
- AB Cyclodextrin thin films were fabricated using either self-assembled monolayers (SAM) or sol-gel techniques. The resulting host receptor thin films on the substrates of surface acoustic wave (SAW) resonators were studied as a method of tracking org. toxins in vapor phase. Monolayer cyclodextrin coatings on 200 MHz SAW devices yielded ppm sensitivity while thicker sol-gel coatings gave responses indicating middle-ppb-sensitivity (.apprx.50 ppb) for those sensor-host-receptors and org.-toxin pairs with optimum mutual matching of polarity, size, and structural properties. Also, the cyclodextrin polymers are efficient in removing orgs. from water down to ppb

levels; which rendered these polymers having great potential for advanced water purifn.

IT 7585-39-9,  $\beta$ -Cyclodextrin

(benzoation of)

RN 7585-39-9 HCA

CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

Absolute stereochemistry.

CC 80-2 (Organic Analytical Chemistry)

Section cross-reference(s): 61

IT Coating process

(sol-gel; cyclodextrin thin film for SAW sensors for detection of  $\mbox{org.}$  vapors)

- IT 7585-39-9,  $\beta$ -Cyclodextrin (benzoation of)
- RE CITED REFERENCES
- (1) Boger, J; Helvetica Chimica Acta 1978, V61, P2190 HCA
- (2) Campbell, C; Surface Acoustic Wave Devices and Their Signal Processing Applications 1989
- (3) Cornell, F; Proc Natl Symp on Measuring and Interpreting VOCs is Soil:State of the Art and Research Needs 1993
- (4) Cramer, F; J Am Chem Soc 1967, V89, P14 HCA
- (5) Dickert, F; Adv Mater 1991, V3, P436 HCA
- (6) Feldmann, M; Surface Acoustic Wave for Signal Processing 1989
- (7) Grate, J; Anal Chem 1988, V60(17), P869
- (8) Grate, J; Anal Chem 1991, V63(17), P1719 HCA
- (9) Grate, J; Anal Chem 1992, V64, P610 HCA
- (10) Harata, K; Bull Chem Soc Jpn 1975, V48, P2049
- (11) Henricks, A; The Cost Effectiveness of Field Screening for VOCs, Emerging Technology Symposium 1993
- (12) Li, D; Langmiur 1993, V9(12), P3341 HCA
- (13) Moore, L; Adv Mater 1995, V7, P729 HCA
- (14) Takeo, K; J Carbohydrate Chem 1988, V7(2), P293 HCA
- (15) Teiichi, M; Chem Express 1989, V4, P645
- L47 ANSWER 7 OF 13 HCA COPYRIGHT 2009 ACS on STN
- AN 127:249612 HCA Full-text
- OREF 127:48765a,48768a
- TI Paper and paperboard coated or laminated with films that trap environmental contaminants for food packaging
- IN Wood, Willard E.; Beaverson, Neil J.
- PA Cellresin Technologies, Llc, USA
- SO PCT Int. Appl., 73 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 6

PI WO 9733044 A1 19970912 WO 1997-US2580		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	PI	WO 9733044	A1	19970912	WO 1997-US2580	199702

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W: BR, CA, CN, JP, KR, MX, SG

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 5776842 A 19980707 US 1996-603337

199602

<--EP 888480 A1 19990107 EP 1997-906672 199702 20 <--EP 888480 20020123 B1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI BR 9707860 19990727 BR 1997-7860 199702 20 <--JP 2001503340 Τ 20010313 JP 1997-531785 199702 20 <--AT 212396 Т 20020215 AT 1997-906672 199702 20 US 5882565 19990316 US 1997-861904 Α 199705 22 <--HK 1017398 A 1 20020830 HK 1999-102305 199905 24 <--PRAI US 1996-603337 Α 19960220 <--US 1994-264771 Α2 19940623 <--US 1995-570599 Α1 19951211 <--US 1996-755461 В1 19961122 <--WO 1997-US2580 W 19970220 <--ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT Laminated films or coatings on paper and paperboard contain AΒ cyclodextrin derivs. with substituents that allow the deriv. to be compatible with the polymer in the film or coating and that trap

IT 113573-77-6,  $\beta$ -Cyclodextrin acetate

trimethylsilyl ether.

(paper and paperboard coated or laminated with films contg. cyclodextrin derivs. that trap environmental contaminants for food packaging)

environmental contaminants for use in packaging of food. A typical

film was based on LLDPE and contained 0.5%  $\beta$ -cyclodextrin

RN 113573-77-6 HCA

CN  $\beta$ -Cyclodextrin, acetate (CA INDEX NAME)

CM 1

CRN 7585-39-9 CMF C42 H70 O35

Absolute stereochemistry.

CM 2

CRN 64-19-7 CMF C2 H4 O2 0 HO— C— CH3

IC ICM D21H027-10 ICS D21H019-24 CC 43-9 (Cellulose, Lignin, Paper, and Other Wood Products) Section cross-reference(s): 17 Coating materials ΙΤ Food (paper and paperboard coated or laminated with films contg. cyclodextrin derivs. that trap environmental contaminants for food packaging) ΙT 113573-77-6,  $\beta$ -Cyclodextrin acetate (paper and paperboard coated or laminated with films contg. cyclodextrin derivs. that trap environmental contaminants for food packaging) CITED REFERENCES (1) Anon: EP 0454910 A1 HCA (2) Anon; DE 19520989 A1 HCA (3) Anon; US 4357468 A HCA OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) L47 ANSWER 8 OF 13 HCA COPYRIGHT 2009 ACS on STN 126:76193 HCA Full-text AN OREF 126:14727a,14730a TΙ Use of inclusion compounds of cyclic polysaccharides as charge control agents Baur, Ruediger; Macholdt, Hans-Tobias INHoechst A.-G., Germany PASO Eur. Pat. Appl., 28 pp. CODEN: EPXXDW DΤ Pat.ent. LAGerman FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_

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199605 06

A2 19961113 EP 1996-107060

EP 742230 A3 19971001

EP 742230

PI

DE	R: 1951		CH,	DE,	FR, A1		IT <b>,</b> 19961		DE	1995-19517034	
											199505 10
										<	
CA	2176.	398			A1		19961	1111	СА	1996-2176398	
											199605 09
										<	
JP	0832	5305			А		19961	1210	JΡ	1996-115127	
											199605
											09
										<	
US	5800	602			Α	-	1998(	0901	US	1996-647067	
											199605
											09

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PRAI DE 1995-19517034 A 19950510 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 126:76193

AB Inclusion compds. of cyclic polysaccharides are useful for controlling charges in electrophotog. toners and developers, triboelec. and electrokinetic sprayable powders and powd. varnishes, and electrets. A typical inclusion compd. was manufd. by heating 60 mL water contg. 0.84 g LiCl and 12.9 g  $\gamma$ -cyclodextrin at 30-100° until a clear soln. was obtained, removing the water in vacuo at 30-100°.

### IT 160433-81-8

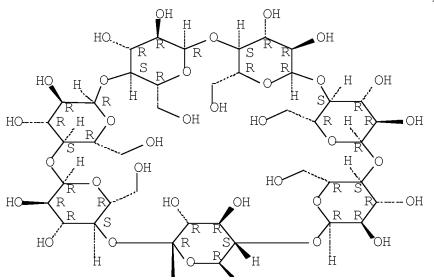
(inclusion compds. of cyclic polysaccharides as charge control agents in electrophotog. toners and powd. varnishes)

RN 160433-81-8 HCA

CN  $\beta$ -Cyclodextrin, compd. with sodium acetate (9CI) (CA INDEX NAME)

CM 1

CRN 7585-39-9 CMF C42 H70 O35



CM 2

CRN 127-09-3

CMF C2 H4 O2 . Na

● Na

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IC
    ICM C08B037-16
     ICS G03G009-097; C09D005-03
CC
    42-5 (Coatings, Inks, and Related Products)
    Section cross-reference(s): 74
    Coating materials
ΙT
        (powder, triboelec.; inclusion compds. of cyclic polysaccharides
        as charge control agents in electrophotog. toners and powd.
       varnishes)
    7585-39-9D, \beta-Cyclodextrin, inclusion compds. with quaternary
ΙT
    ammonium salts 17465-86-0D, \gamma-Cyclodextrin, inclusion
                                             33999-35-8
    compds. with quaternary ammonium salts
                                                        34003-97-9
                 126306-73-8
     51128-12-2
                               152195-65-8 160433-81-8
    184717-41-7
                  184717-42-8
                                184717-43-9
                                             184717-44-0
                                                           184717-45-1
    184717-46-2
                 184717-47-3 184717-48-4
                                             184717-50-8
                                                           184717-51-9
    184717-52-0 184717-53-1 184717-54-2
                                             184717-55-3
                                                           184717-57-5
    184717-58-6 184717-59-7 184717-60-0
                                             184717-61-1
                                                           184717-62-2
                                             184717-66-6
    184717-63-3
                 184717-64-4 184717-65-5
                                                           184717-67-7
                  184717-69-9 184717-70-2
    184717-68-8
                                              184717-71-3
                                                           184717-72-4
    184717-73-5 184717-74-6 184717-75-7
                                             184717-76-8
                                                           184717-77-9
    184717-78-0 184717-79-1 184717-80-4
                                             184717-81-5
                                                           184717-82-6
    184717-83-7
                 184717-84-8 184717-85-9
                                             184717-86-0
                                                           184717-87-1
    184717-88-2 184717-89-3 184717-90-6
                                             184717-91-7
                                                           184717-92-8
    184717-93-9 184717-94-0 184717-95-1
                                             184717-96-2
                                                           184717-97-3
    184717-98-4
                  185322-54-7
        (inclusion compds. of cyclic polysaccharides as charge control
        agents in electrophotog. toners and powd. varnishes)
                    HCA COPYRIGHT 2009 ACS on STN
L47
    ANSWER 9 OF 13
ΑN
    125:88155 HCA
                    Full-text
OREF 125:16633a,16636a
    Redispersible powdered polymers containing cyclodextrins or their
ΤI
    derivatives
ΙN
    Figge, Reiner; Haas, Wolfgang
    Wacker-Chemie GmbH, Germany
PΑ
    Ger. Offen., 14 pp.
SO
    CODEN: GWXXBX
DT
    Patent
LA
    German
FAN.CNT 1
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PATENT NO. KIND DATE APPLICATION NO. DATE
------PI DE 4440236 A1 19960515 DE 1994-4440236
199411

10

CA 22	3408		A1	1996	0523	CA	1995-	2203408		199511 09
WO 96	15187		A1	1996	0523	WO	< 1995-			199511 09
						GB, GI	<	IT, LU,	MC,	
EP 79	SE 1033		A1	1997	0827	EP	1995-	939247		199511 09
EP 79	1033		R1	1998	0701		<			
						IT, L	I, NL,	SE		
CN 11	52969		A	1997	1022	CN	1995-	196161		199511 09
CNI 10	70000		C	2002	0000		<			
	78899 511782		T	2002 1997		JP	1995-	515716		199511 09
							<			0 9
JP 29			В2	1999		7	1005	000047		
AT 16	1889		Τ	1998	0715	AT		939247		199511 09
ES 21	19496		Т3	1998	1001	ES	< 1995-	939247		
										199511 09
US 57	77003		А	1998	0707	US	< 1997-	809386		199703
							<			19
NO 97	)2148		A	1997	0509	NO	1997-			199705 09
FI 97	11983		Α	1997	061N	FI	<	1983		
11 97	, 1, 0, 0		Δ.	1 <i>) )  </i>	0010			100		199705 09
							<			

PRAI DE 1994-4440236 Α 19941110 <--WO 1995-EP4412 W 19951109 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT The title compns., with as narrow a range of compns. as possible, contain cyclodextrins or their alkyl, hydroxyalkyl, and/or carboxyalkyl derivs. of specified structure as protective colloids. Redox polymn. of 30% acrylamide 3.69, styrene 16.6, and Bu acrylate 16.6 kg in the presence of 1.85 kg cyclodextrin gave a 44.5% emulsion (pH 3.7) of copolymer with av. particle size 350 nm, contq. almost no coarse particles. The use of this emulsion in the prepn. of redispersible powders is exemplified.

ΙT 28986-04-1,  $\beta$ -Cyclodextrin monoacetate

> (dispersant; redispersible powd. polymers contq. cyclodextrins or their derivs.)

28986-04-1 HCA RN

 $\beta$ -Cyclodextrin, monoacetate (9CI) (CA INDEX NAME) CN

CM

CRN 7585-39-9 C42 H70 O35 CMF

H OH

CM 2

CRN 64-19-7 CMF C2 H4 O2

IC ICM C08L057-00

ICS C08L005-16; C08J003-12; C08F002-22; C04B024-38; C08F002-44; C08F006-14; C09D157-00; C09D005-34; C09D007-12

ICI C08L057-00, C08L033-06, C08L031-02, C08L027-00, C08L025-00, C08L023-02; C09J157-00, C09J105-16; C09D157-00, C09D133-06

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 44

IT Adhesives

Binding materials

Coating materials

Mortar

(redispersible powd. polymers contg. cyclodextrins or their derivs. for use in)

IT 7585-39-9,  $\beta$ -Cyclodextrin 7585-39-9D,  $\beta$ -Cyclodextrin, Me and hydroxypropyl and carboxymethyl ethers 10016-20-3,

 $\alpha$ -Cyclodextrin 17465-86-0,  $\gamma$ -Cyclodextrin

28986-04-1,  $\beta$ -Cyclodextrin monoacetate

(dispersant; redispersible powd. polymers contg. cyclodextrins or their derivs.)

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L47 ANSWER 10 OF 13 HCA COPYRIGHT 2009 ACS on STN AN 124:59731 HCA Full-text

ΤI Partially acylated  $\beta$ -cyclodextrins. Hirsenkorn, Rolf IN PA Consortium fuer Elektrochemische Industrie GmbH, Germany SO Eur. Pat. Appl., 12 pp. CODEN: EPXXDW DT Patent LA German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. PI EP 678525 A1 19951025 EP 1995-105907 199504 20 <--EP 678525 B1 19980128 R: BE, DE, FR, GB, IT, NL DE 4414128 A1 19951026 DE 1994-4414128 199404 22 <--CA 2147224 A1 19951023 CA 1995-2147224 199504 18 <--CA 2147224 С 20020702 US 5633368 19970527 US 1995-423887 А 199504 18 <--JP 07300501 A 19951114 JP 1995-97278 199504 21 <--B2 19970122 JP 2574664 CN 1112129 19951122 CN 1995-104760 Α 199504 22 <--C 20020807 CN 1088716 PRAI DE 1994-4414128 A 19940422 <--ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 124:59731 OS

Partially acylated  $\beta$ -cyclodextrins, prepd. by the reaction of  $\beta$ -

cyclodextrin (I) with an acylating agent in the presence of a basic catalyst, are useful for solubilization of difficultly water-sol.

OREF 124:11201a,11204a

AB

compds., e.g. steroids; as formulation aids in pharmaceutical, cosmetic, and agrochem. products; for stabilization of light-, heat-, or oxidn.-sensitive materials; for de-greasing and cleaning of desired surfaces; for substitution of org. solvents, esp. in sepn. and extn. of substances from lipophilic media; as auxiliaries, esp. in the coating and(or) adhesion adjustment in the paper, leather, and textile industries; as phase-transfer catalysts; or for flavor and odor masking. Thus, I and Na acetate were suspended in acetic acid and heated to 105°; then acetic anhydride was slowly added dropwise during 1 h. The mixt. was heated at reflux until it dissolved (after apprx.14 h) and cooled to room temp. to give acetyl- $\beta$ -cyclodextrin.

IT 99490-09-2P 113573-77-6P

(partially acylated  $\beta$ -cyclodextrins as solubilizers and solvents and stabilizers)

RN 99490-09-2 HCA

CN  $\beta$ -Cyclodextrin, propanoate (9CI) (CA INDEX NAME)

CM 1

CRN 7585-39-9 CMF C42 H70 O35

CM 2

CRN 79-09-4 CMF C3 H6 O2

113573-77-6 HCA RN

 $\beta$ -Cyclodextrin, acetate (CA INDEX NAME) CN

CM 1

CRN 7585-39-9

CMF C42 H70 O35

PAGE 1-A

CM 2

CRN 64-19-7 CMF C2 H4 O2

IC ICM C08B037-16

CC 44-6 (Industrial Carbohydrates)

IT 7585-39-9DP,  $\beta$ -Cyclodextrin, acylated 99490-09-2P 113573-77-6P

(partially acylated  $\beta$ -cyclodextrins as solubilizers and solvents and stabilizers)

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L47 ANSWER 11 OF 13 HCA COPYRIGHT 2009 ACS on STN

AN 108:152240 HCA Full-text

OREF 108:24997a,25000a

TI Persistent fragrant and insect repellent coatings for buildings

IN Zhu, Yuanzheng

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 85102849	A	19860716	CN 1985-102849	198504 01

<--

PRAI CN 1985-102849

19850401 <--

The title coating materials contain oligosaccharide-insecticide inclusion compds. and microencapsulated perfumes. A coating material contained an oligosaccharide-insecticide inclusion compd. 0.25, microencapsulated perfumes 0.5, Zn stearate 3, aq. 801 building glue (solids 8-10%) 100, Ti white (A101, A102) 4, lithopone (28-30% ZnS) 10, light CaCO3 300, talc 13, pigments 1-10 parts, nonionic surfactants, water, and urea.

IT 7585-39-9D, inclusion compds. with chrysanthemic acid esters

(insecticides, coatings contg. microencapsulated perfumes and)

RN 7585-39-9 HCA

CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

IC ICM C09D005-00

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 5, 40

IT Coating materials

(contg.  $\beta\text{-cyclodextrin-insecticide}$  inclusion compds. and microencapsulated perfumes, for buildings)

TT 7585-39-9D, inclusion compds. with chrysanthemic acid esters 10453-89-1D, esters, inclusion compds. with cyclodextrin 90052-68-9

(insecticides, coatings contg. microencapsulated perfumes and)

L47 ANSWER 12 OF 13 HCA COPYRIGHT 2009 ACS on STN

AN 88:171957 HCA Full-text

OREF 88:27095a,27098a

TI Aqueous compositions containing starch ester dispersants

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IN Glowaky, Raymond Charles; Rudolph, Stephen Edward; Bierwagen, Gordon Paul
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PA Sherwin-Williams Co., USA

SO U.S., 12 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4061611	A	19771206	US 1976-725604	197609

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PRAI US 1976-725604

19760922 <--

AB Low-mol.-wt. hydrolyzed starch having a plurality of anhydroglucose units or a deriv. of this starch is esterified by  $\geq 0.5$ mols./anhydroglucose unit of acylating agent consisting of 0.1-2.9 mols.  $\geq 1$  polycarboxylic acid anhydride and 0.1-2.9 mols.  $\geq 1$ monocarboxylic acid anhydride to give dispersing agents useful in replacing dispersing agents derived from petrochem. for water-based paints. Thus, 500 parts propionic anhydride [123-62-6] was added in 2 h at 180°F to 400 parts C5H5N soln. contg. 250 parts com. hydrolyzed waxy maize starch (dextrose equiv. 5-6, ester substitution <0.1), and the reaction mixt. was heated an addnl. 2 h at  $180\,^{\circ}\mathrm{F}$  to give an intermediate mixt., to which 77 parts succinic anhydride [108-30-5] was added in 30 min, and the reaction mixt. was heated an addnl. 2 h at 180°F to give starch propionate succinate (I) [62655-92-9]. Gloss house paint contg. I as dispersant gave coatings with similar phys. properties to the same paint contq. Tamol 731 as dispersant.

IT 62655-70-3P

(manuf. of, for dispersing agents for water-based paints)

RN 62655-70-3 HCA

CN Dextrin, acetate hydrogen 1,2-cyclohexanedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-53-9

CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 1687-30-5 CMF C8 H12 O4

CM 3

CRN 64-19-7 CMF C2 H4 O2

HO— C— CH3

IC C08L003-06

INCL 260017400ST

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 44, 46

IT Coating materials

(water-thinned paints, dispersing agent for, starch diacid monoacid mixed esters as)

IT 61869-77-0P **62655-70-3P** 62655-87-2P 62655-88-3P

62655-91-8P 65547-38-8P

(manuf. of, for dispersing agents for water-based paints)

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L47 ANSWER 13 OF 13 HCA COPYRIGHT 2009 ACS on STN

AN 86:141971 HCA Full-text

OREF 86:22299a,22302a

TI Mixed starch esters

IN Rudolph, Stephen E.; Glowaky, Raymond C.

PA Sherwin-Williams Co., USA

SO Ger. Offen., 59 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE 	APPLICATION NO.	DATE -
PI	DE 2639349	A1	19770303	DE 1976-2639349	197609 01
	US 4011392	A	19770308	< US 1975-609327	197509 02
	CA 1042879	A1	19781121	< CA 1976-252742	197605 18
	JP 52029884	А	19770307	< JP 1976-94576	197608 10
	FR 2322872	A1	19770401	< FR 1976-26120	197608 30
	GB 1562302	A	19800312	< GB 1976-36505	197609 02
				<	

PRAI US 1975-609327 A 19750902 <--

Reacting hydrolyzed starch (I) [9005-25-8] or dextrin with mono- and polycarboxylic anhydrides in the presence of pyridine (II) or DMF gave I esters for use in coating. Thus, a mixt. of I 194.8, H2O 5.2, Ac2O 262.2, succinic anhydride 77.7 and II 200.0 parts was stirred for total .apprx.5 h at 82° to give hydrolyzed starch acetate succinate (III) with 2.5 total substitution degree (SD). Applying a mixt., having 20% pigment vol. concn. of neutralized III (total SD 2.19) contg. 30% aminoplast in H2O-butylcellosolve (80:20) on a substrate gave a coating with 8 H pencil hardness which showed insignificant blister formation after 24 h immersion in H2O.

IT 62655-70-3P

(prepn. of)

RN 62655-70-3 HCA

CN Dextrin, acetate hydrogen 1,2-cyclohexanedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-53-9

CMF Unspecified CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 1687-30-5 CMF C8 H12 O4

CM 3

CRN 64-19-7 CMF C2 H4 O2

IC C08B031-04

CC 44-5 (Industrial Carbohydrates)

IT Coating materials

(hydrolyzed starch esters contg. hydroxymethylated melamine)

IT 62655-70-3P

(prepn. of)

OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

=> D L48 1-6 TI

L48 ANSWER 1 OF 6 HCA COPYRIGHT 2009 ACS on STN

TI Composition comprising dextrinsulfate for the treatment of sexual transmitted diseases

L48 ANSWER 2 OF 6 HCA COPYRIGHT 2009 ACS on STN

- TI Water-repellent cosmetics with good emulsion stability containing triglycerin-modified silicones and salts
- L48 ANSWER 3 OF 6 HCA COPYRIGHT 2009 ACS on STN
- TI Use of cyclodextrin derivatives for skin preparations, etc., their micelles or nanoparticles, and compositions containing the derivatives
- L48 ANSWER 4 OF 6 HCA COPYRIGHT 2009 ACS on STN
- TI Manufacture of ester-crosslinked chitosan hydrogels as support material and quaternized, cyclodextrin-modified chitosan
- L48 ANSWER 5 OF 6 HCA COPYRIGHT 2009 ACS on STN
- TI Complexes of insoluble cyclodextrin polymers
- L48 ANSWER 6 OF 6 HCA COPYRIGHT 2009 ACS on STN
- TI Semisolid compositions containing cyclic silicones for pharmaceutical ointments and cosmetic creams

### => D L48 3 BIB ABS HITSTR HITIND RE

- L48 ANSWER 3 OF 6 HCA COPYRIGHT 2009 ACS on STN
- AN 135:376708 HCA Full-text
- TI Use of cyclodextrin derivatives for skin preparations, etc., their micelles or nanoparticles, and compositions containing the derivatives
- IN Eric, Perrier; Nicholas, Terry; Rival, Delphine; Coleman, Anthony
- PA Coletica, Fr.
- SO Jpn. Kokai Tokkyo Koho, 26 pp. CODEN: JKXXAF

CODEN: JKKKA

- DT Patent
- LA Japanese
- FAN.CNT 1

I AIN	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2001323002	A	20011120	JP 2000-222967	200007 24
				<	
	JP 3582583	В2	20041027		
	FR 2808691	A1	20011116	FR 2000-6102	
					200005 12

FF	R 2808691	В1	20050624			
GI	3 2362102	A	20011114	GB	2000-16653	
						200007
						06
					<	
GI	3 2362102	В	20021218			
US	6524595	В1	20030225	US	2000-613773	
						200007
						11
					<	
DI	E 10033990	A1	20011122	DE	2000-10033990	
						200007
						13
					<	
DF	E 10033990	В4	20071227			
	S 20030152602	A1	20030814	IIS	2002-318903	
0.	20000102002	111	20030011	0.0	2002 310303	200212
						13
					<	10
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PRAI FR 2000-6102 A 20000512 <-- US 2000-613773 A3 20000711 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT AB Cyclodextrin in which OH groups are substituted with OCOR or NR1R2 [R, R1, R2 = C1-30, preferably C2-22 chain or cyclic (un)satd. (hydroxy)hydrocarbyl], are useful as tissue penetration promoters for cosmetics and drugs, etc. The cyclodextrin derivs. may form micelles or nanoparticles, in which active components are enclosed. Also claimed are compns. contg. the derivs. and vehicles, esp. phospholipids such as lecithins, surfactants, or cationic lipids, and method for skin-care method by applying the cyclodextrin derivs. to body including face.  $\beta$ -Cyclodextrin laurate (no. of laurate residue is 6-10, prepn. given) was dissolved in acetone and the soln. was gradually added to H2O to give milky white soln. Acetone was evapd. from the soln. and the residue was redispersed in H2O to give nanoparticles having av. particle size 212 nm  $\pm$  5 nm.

IT 7585-39-9DP,  $\beta$ -Cyclodextrin, alkyloyl esters (prepn. of cyclodextrin esters or amino derivs. capable of forming micelles or nanoparticles for drugs, cosmetics, and food)

RN 7585-39-9 HCA

CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

IT 7585-39-9,  $\beta$ -Cyclodextrin (prepn. of cyclodextrin esters or amino derivs. capable of forming micelles or nanoparticles for drugs, cosmetics, and food)

RN 7585-39-9 HCA CN  $\beta$ -Cyclodextrin (CA INDEX NAME)

IC ICM C08B037-16 ICS A61K007-00; A61K007-025; A61K007-032; A61K007-075; A61K009-10; A61K047-40

CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 17, 62

9003-01-4D, Polyacrylic acid, crosslinked products with allyl ethers of pentaerythritol or sucrose or both (gel carrier; prepn. of cyclodextrin esters or amino derivs. capable of forming micelles or nanoparticles for drugs, cosmetics, and food)

IT 79-04-9DP, reaction products with  $\beta$ -cyclodextrin laurate 4755-77-5DP, reaction products with  $\beta$ -cyclodextrin laurate 7585-39-9DP,  $\beta$ -Cyclodextrin, alkyloyl esters 7693-46-1DP, reaction products with  $\beta$ -cyclodextrin laurate

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374690-20-7P 374690-21-8P 374690-22-9DP, reaction products with \beta\text{-cyclodextrin} laurate 374690-23-0DP, reaction products with \beta\text{-cyclodextrin} laurate 374690-24-1P (prepn. of cyclodextrin esters or amino derivs. capable of forming micelles or nanoparticles for drugs, cosmetics, and food)
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- IT 79-37-8, Oxalyl chloride 79-37-8D, Oxalic acid chloride, reaction products with  $\beta$ -cyclodextrin laurate 107-15-3, Ethylenediamine, reactions 110-15-6D, Butanedioic acid, reaction products with  $\beta$ -cyclodextrin laurate, reactions 2050-92-2 4755-77-5, Ethyl oxalyl chloride 7585-39-9,  $\beta$ -Cyclodextrin 7693-46-1, 4-Nitrophenyl chloroformate 15181-48-3D, Chlorosulfate, reaction products with  $\beta$ -cyclodextrin laurate 30754-23-5, Heptakis(6-deoxy-6-iodo)- $\beta$ -cyclodextrin 74426-35-0
  - (prepn. of cyclodextrin esters or amino derivs. capable of forming micelles or nanoparticles for drugs, cosmetics, and food)
- OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)